

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Barbara Beerhalter	Chair
Cynthia A. Kitlinski	Commissioner
Norma McKanna	Commissioner
Robert J. O'Keefe	Commissioner
Darrel L. Peterson	Commissioner

In the Matter of the Implementation of an Energy Conservation Program for  
Northern States Power Company (Gas Utility)

ISSUE DATE: January 5, 1988

DOCKET NO. G-002/M-87-233

ORDER APPROVING NORTHERN STATES POWER COMPANY'S  
(GAS UTILITY) CONSERVATION IMPROVEMENT PROGRAM AND  
REQUIRING NEW PROJECTS AND INFORMATIONAL FILINGS

PROCEDURAL HISTORY

On May 1, 1987, Northern States Power Company, Gas Utility, (NSP or the Company) filed its Conservation Improvement Program (CIP) with the Minnesota Public Utilities Commission (Commission), pursuant to the provisions of Minn. Rules, part 7840.0500. Notice of filing was given to participants in NSP's last general rate case and participants in NSP's two previous CIP cases, pursuant to the provisions of Minn. Rules, part 7840.0800.

Between May 29, 1987 and September 29, 1987 the following participants submitted comments and / or alternative conservation projects for the Commission's consideration: The City of St. Paul, The Twin Cities Neighborhood Housing Services Inc., the Minnesota Department of Public Service (DPS), Ramsey Action Programs Inc., NSP, and The Tool Lending Library.

On June 4, 1987, the Commission issued an Order Granting Extension, which granted the DPS request for extension of filing date.

On June 12, 1987 the Commission issued an order Regarding Filing Deficiencies and Requiring Additional Information.

On July 2, 1987, the Commission issued an Order Granting Extensions, allowing some participants the opportunity to submit additional information.

On July 17, 1987, the Commission issued an Order Granting Extensions, allowing participants additional time to file reply comments.

On November 2, 1987, the Commission met to consider NSP's proposed CIP.

On November 4, 1987, the Commission issued an Order Extending Program, granting NSP's request to extend operation of its conservation projects.

FINDINGS AND CONCLUSIONS

The Commission received no requests for a contested case hearing on NSP's proposed CIP and will therefore resolve this case on the basis of the written record.

NSP's Proposed Projects

The first issue is whether the projects proposed by the Company and other participants should be approved as filed, modified, or rejected.

NSP proposed six projects for approval as its CIP program for 1987-1988 with a total budget of \$750,000. Of the six projects, the following four are existing projects that have been previously approved by the Commission: The Energy Resource Center (ERC), the Neighborhood Energy Consortium (NEC), the Residential Conservation Service (RCS), and the Saint Paul Rental Energy Efficiency Enforcement (SPREEE) project.

As required by the Commission in last year's CIP Order, Northern States Power Company, Docket No. G-002/M-86-249 (October 15, 1986) NSP proposed that one new project be implemented - the House Doctor Pilot Project.

The sixth project proposed by NSP is the Ramsey Action Program (RAP) project. While NSP currently operates a project with RAP, NSP has proposed that the existing project be substantially modified. NSP also proposed to discontinue the Twin City Neighborhood Housing Service (TCNHS) project, which is an existing project approved by the Commission in NSP, G-002/M-86-249.

Several participants recommended that NSP be required either to fund additional projects or to increase the amount of funding on the proposed projects.

NSP argued that any expenditures above NSP-proposed levels should be funded by equivalent reductions in House Doctor expenditures.

The Commission has considered the proposed projects on their individual merit and on how they fit together to make up a comprehensive conservation energy program. The Commission is not limited to approving projects with a total budget equal to the total budget proposed by NSP. Rather, the Commission must insure that NSP makes a significant investment in and expenditures for energy conservation.

In so doing, the Commission will first discuss the projects proposed by NSP and other participants and explain the basis for the Commission's acceptance or rejection of those projects. Next, the Commission will discuss why the ordered CIP expenditures constitute a significant level of investment for NSP.

## **1. HOUSE DOCTOR**

NSP has solicited bids from community groups located within its service area to perform House Doctor services. NSP contended that a competitive bidding process will increase cost-effectiveness. NSP will file a report informing the Commission of the vendors selected prior to implementation of the project.

Under the house doctor project, several conservation services will be performed. House doctor work shall include, but not be limited to: caulking and weatherstripping, sealing of bypasses, furnace testing, electric water heater blankets, checking for gross heat losses, minor insulation and repair work.

NSP proposed a budget of \$200,000 for this project. NSP intends to select at least two vendors to operate the project.

Two other parties, the RAP and the NEC, have requested that the Commission approve a House Doctor project. RAP proposed a budget of \$412,512. It would perform 750 house doctor audits at a cost of \$550 each. The RAP proposal would cover all participants who have incomes of less than 135% of federal poverty guidelines.

The NEC proposed to operate a house doctor program in conjunction with the Energy Resource Center (ERC). It proposed to perform 300 house doctor audits at \$535 each, for a total budget of \$160,500. It proposed that the ERC would assume responsibility for promotional, administrative, and accounting aspects while the NEC would perform the actual house doctor services.

The Commission will approve this project as proposed by NSP. The NSP proposal is appropriate because it places the responsibility on NSP to select the most qualified and efficient vendors to perform the House Doctor services. By approving the NSP proposal, NSP will be responsible for selecting and monitoring the vendors and demonstrating to the Commission that the program was run effectively.

The Commission finds that the project can be improved by requiring that a furnace cleaning and tuning be added to the NSP House Doctor project. This will increase the amount of natural gas conserved under this project.

The Commission notes that the Minnegasco House Doctor project costs only \$407 per household with an estimated payback of 5.9 years. If NSP's project is substantially more costly than this, the program's cost effectiveness may be reduced. With the addition of the furnace cleaning and tuning, it appears that a reasonable cost for this project is approximately \$425 and this would service 470 households. If the cost is greater than this, NSP will be required to demonstrate why the higher cost is reasonable.

## **2. ENERGY RESOURCE CENTER (ERC)**

The ERC was created in 1981 as a public-private partnership by the City of St. Paul and NSP to provide innovative energy financing and outreach services to NSP natural gas customers in St. Paul and surrounding communities. The ERC coordinates and administers financing programs available from the Minnesota Housing Finance Agency, the federal government, the City of St. Paul, Community Development Block Grants, the Exxon Oil Overcharge funds, and private foundations.

The ERC operates the following programs:

### **a. Single Family Loan Program**

This project provides loans to single family homeowners for appropriate conservation improvements. Major funds are provided by the Minnesota Housing Finance Agency (MHFA) and the Community Development Block Grant program. The ERC markets the programs and originates the loans. Each loan is purchased upon approval by the MHFA and is serviced by a separate loan servicing company. The loan is used to finance major weatherization projects recommended by an energy audit. These projects may include wall insulation, storm window replacement, and heating system replacement.

The ERC expects to originate 550 loans in the 1987-88 CIP year.

b. Rental Financing and Technical Assistance Program

The ERC offers low-interest financing and technical assistance services to rental property owners in NSP's gas service territory. Capital is provided through the MHFA Rental Energy Loan Program and a grant from the St. Paul Foundation as well as a joint bond sale between the cities of St. Paul and Minneapolis.

The ERC estimates that it will make 150 loans during the 1987-88 CIP year and that 900 low and moderate income rental units will be improved.

c. Outreach and Technical Information Service

NSP's information service, "Ask NSP", routinely directs customers to the ERC with questions on energy efficiency and financing programs. The ERC provides educational services to interested groups through its operation of the NSP Learning Center in St. Paul.

d. Administrative Support Services

The ERC staff works with loan servicing agents, trustees, and NSP staff to monitor loan repayment, fund balances, quarterly program reports, and compliance with program guidelines and procedures.

e. Proposed Pilot Commercial Financing Project

The ERC proposed to develop and administer a pilot commercial energy improvement financing program for small commercial properties in NSP's gas service territory. The primary task of this project would be to investigate and develop an information base needed to implement a small commercial financing program.

Commission Findings

The funds provided by NSP finance some of the administrative and overhead costs of the conservation programs operated by the ERC. NSP proposed to fund them at a level of \$150,000 this year. This is a decrease from the amount authorized by the Commission last year for this project of \$165,000. The ERC requested a funding level of \$200,000.

This project is unique in that NSP provides funding to the ERC for conservation activities on a lump sum basis, instead of on a performance basis.

The Commission finds that the current budget of \$165,000 should not be reduced for this year. The funds provided by NSP are highly leveraged, which allows the ERC to provide valuable conservation services at minimum cost to NSP ratepayers. The Commission will not approve the budget level of \$150,000 proposed by NSP because this decreased funding level could jeopardize the ERC's project. A decrease in NSP's support for this organization was not shown to be reasonable and it was not shown where the lost revenue would be recovered.

The Commission also finds that an increase in the funding level was not supported. A need for an increase in the funding level from NSP was not demonstrated and it was not shown that an increase in the funding level would result in an increase in conservation activities. The Commission concludes that the funding for ERC should remain at \$165,000 per year for this year.

The Commission is concerned that the funding for this organization is not on a performance basis. This leads to two problems. First, an objective level of funding is difficult to determine without a concomitant, quantifiable measure of conservation activity. Second, a lump sum funding method provides little incentive for improved levels of performance and efficiency. Therefore, the Commission will require that NSP and the ERC negotiate a payment schedule based upon some level of performance and submit it as part of NSP's May 1, 1987 CIP filing.

3. **ST. PAUL NEC**

A. Energy Audit and Energy Plan

The NEC proposed budget is:

Audits 1,800 at \$72.00	\$129,600
Energy plans 400 at \$102.00	\$ 40,800
Materials and Supplies	\$ 7,500
Training	<u>\$ 6,000</u>
Total	\$183,900

The NEC also requests that the \$10.00 audit fee be waived for the low income participants ( $1,800 \times .2 \times \$10.00 = \$3,600$ ). This would increase the cost of the project to NSP, bringing the total budget to \$187,500.

This part of the NEC-proposed program would provide energy audits and related services to low and moderate income households in St. Paul. NEC expects that it will complete 1500 to 1600 audits during the 1986-87 CIP year. NEC stated that the demand is increasing and expects this trend to continue. NSP disputed this claim.

NEC also proposed to include \$6,000 for auditor training. NSP stated that these training funds should not be included.

NEC proposed to increase the number of home energy plans from 200 to 400. NSP stated that this would duplicate services provided by ERC and RAP.

NEC states that 20% of those receiving audits will have incomes below 80% of the median income. NEC proposes to market the program through mailings, bill inserts, press releases, newspaper columns, and advertising.

NSP proposed a funding level of \$120,000 for home energy audits and an additional \$5,000 for material and supplies. This is the same budget level set by the Commission in last year's CIP order. The NEC requested \$183,900 for audits.

NSP does not propose to increase the audit program budget for the following reasons:

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| 1. | NSP does not expect the significant rise in demand for audits (33%) cited by NEC;                                      |
| 2. | audit plans duplicate services provided by ERC and RAP;  |
| 3. | training costs are included in the \$72.00 audit; and  |
| 4. | the reduction in proposed material cost corresponds to the reduced number of audits NSP believes the NEC will perform. |

NSP proposed to eliminate the energy plan portion of this project. In last year's CIP, the Commission approved \$20,000 for audit supplements (i.e., energy plans) for low to moderate income households. The energy plan further specifies the audit recommendation and guides the household to additional assistance resources. NSP paid NEC \$30 for each energy plan provided, up to a maximum of 667 plans.

In the first six months of the 1986 CIP year, the NEC performed 705 audits (51% of the number authorized for the CIP year), 45 energy plans (6.6% of the number authorized) and spent \$868 dollars on printing/materials (17% of amount authorized).

The DPS stated that the additional services provided during the RCS audits by the NEC have significantly enhanced the cost effectiveness of the project by further encouraging energy improvements. The DPS supports approval of the entire \$183,900 budget requested by NEC for audits, energy plans, supplies and training.

The Commission finds that a budget of \$129,600 for audits as proposed by the NEC is appropriate because the audits are paid for on a performance basis.

The Commission finds that a budget of \$5,000 for materials is appropriate because a need for the larger budget amount for materials was not demonstrated. The Commission also finds that the NEC should be allowed to use this funding for its proposed services to allow it flexibility in delivering the conservation services that are needed most.

The Commission will disapprove the requested \$6,000 for training because training costs are built into the \$72.00 audit fee.

The Commission will disapprove the audit fee waiver because it was not shown that the \$10.00 fee is a significant barrier to the delivery of energy audits to low income families.

The Commission will approve the delivery of 200 energy plans to be funded at \$30 each for a total of \$6,000. Energy plans may be effective at encouraging low income customers to take conservation measures. The Energy plan does not duplicate the activities of the ERC.

#### **B. Energy Conservation Seminars**

The NEC proposed to offer 20 public education seminars on various topics in residential and commercial energy conservation. Topics would include attic and wall insulation, heating plant repair, ventilation and low-cost measures. The NEC predicted that the 20 seminars would be attended by 500 persons.

NSP stated that the ERC currently offers seminars as do several area vocational schools.

The NEC presented an analysis of this project showing that 25 customers would attend each seminar and that, on average, each would invest \$389 in conservation measures and reduce consumption by 110 CCF per house. These figures were based on a 1986 evaluation of the NEC project. This analysis is suspect because all energy savings are attributed to the seminar program itself. This seems to be an unreasonable assumption because some energy savings likely would have occurred even without the seminars.

In addition, the NEC only averaged 14 customers per seminar during the last year this project was approved. It seems unlikely that the NEC could increase attendance to an average of 25 participants per seminar. The Commission concludes that this project should not be approved.

#### C. Demonstration Video

Under this project, the NEC would produce and circulate a video on low-cost conservation measures. The video would be 30 minutes long and cover topics such as caulking and weatherstripping, water heater insulation, low-flow showerheads and bypasses. The video would be circulated to 53,000 cable-wired homes in St. Paul and to public libraries and community centers.

The DPS did not recommend that this project be approved because many low income customers would not have access to the cable network and because this could end up to be an advertising slot for vendors.

NSP opposed this program because this information is already available from other sources. NSP offered to work with NEC to get materials contractors to provide this information in a video format.

The Commission finds that the video project should be disapproved and that NSP should be required to work with the NEC to obtain this material at no cost.

#### D. Demonstration Furnace Retrofit

This project would provide tuning, cleaning, and adjusting of natural gas furnace to increase their efficiency. The NEC proposed to service 50 furnaces at a per unit costs of \$150; \$20 would be paid by the participant and \$130.00 would be paid by NSP.

The Commission finds that the proposed budget for this project is excessive. A similar project was approved by the Commission for Northern Minnesota Utilities (NMU) at a cost of approximately \$45 per furnace tuneup, compared to the proposed cost of \$150 per tuneup by the NEC. Therefore, the Commission will not approve the project as proposed by the NEC. The Commission does find that furnace cleaning and tuning can be a cost effective conservation activity if performed at a reasonable cost. Further, the Commission finds that this service can best be performed in conjunction with the House Doctor project. This will avoid the duplication of administrative costs associated with the delivery of a separate project.

### 4. **RAMSEY ACTION PROGRAMS (RAP)**

RAP proposed to conduct a combination program consisting of a house doctor service, deferred loans and household plans. RAP proposed that 750 house doctor analyses be done and 128 loans be made. All participants would receive the house doctor analysis and 15-20% (128) of them would be eligible for the deferred loan averaging \$2,150. Loans would be used for energy conservation improvements to architectural and mechanical systems.

All participants would have incomes less than 135% of federal poverty guidelines.

The deferred loan part of the RAP proposal would be operated in coordination with the Minnesota Housing Finance Agency and the Solar Bank Deferred Loan Program. The program is designed to provide "last resort" funding for those who have exhausted all other funding sources.

RAP proposed the following budget:

House Doctor (750 houses @ \$550)	\$412,500
Deferred Loans (128 loans @ \$2,150)	275,200
Household Plans (30 @ \$35.00)	1,050

NSP proposed that the loan program be restricted to furnace replacement loans for low income participants. NSP stated that this would not be cost-effective but is required for safety reasons. NSP stated that faulty furnaces must be replaced in order for the House Doctor service to be effective.

NSP proposed a budget of:

Deferred loans	\$100,000
Household Plans	2,100

NSP stated that RAP's House Doctor service would be considered for funding as a sub-contractor under NSP's proposed House Doctor project.

The Commission will approve a RAP project substantially as proposed by NSP. The Commission will approve a budget of \$105,000. At an average cost per furnace replacement of \$1,500.00, seventy deferred loans could be delivered (\$1,500 x 70 = \$105,000). The \$1,500 cost consists of \$1,300 for installation costs and \$200 for administrative costs. The Commission will require that this project be evaluated to determine the level of energy savings that result.

## **5. RESIDENTIAL CONSERVATION SERVICE (RCS) AUDITS**

NSP plans to administer the program through community organizations to the maximum extent possible. The budget requested by NSP includes all audit costs except NEC billings and NSP labor costs.

The Commission will approve this project at NSP's proposed budget of \$150,000. The RCS audits are required by federal and state law. The cost of this program was included by the Commission in the conservation cost tracker in the last NSP gas rate case, Northern States Power Company, Docket No. G-002/GR-86-160 (January 27, 1987).

## **6. ST. PAUL ENERGY EFFICIENCY ENFORCEMENT PROGRAM (SPREEE)**

NSP and the City of St. Paul (The City) proposed to continue this project for a second year. Under this project the City would enforce state minimum standards for energy conservation in rental housing. NSP CIP funds are requested for energy audits which would provide technical information needed by city inspectors to enforce the state rental standards. Such local enforcement is permitted by state law and is necessary because the Energy Division of the Department of Public Service is no longer able to enforce the state rental standards as a result of funding cuts.

The City proposed to enforce the state standards in response to complaints. When a complaint is received, the appropriate enforcement officer would have an energy audit performed on the building. The audit results would show the building's compliance or non-compliance with each standard. The enforcement officer would then issue orders for the building to be brought into compliance. The City is requesting a contribution from NSP of \$22,290 compared to \$20,200 approved last year. The City anticipates that 100 buildings would be retrofitted as a result of this project, saving an estimated \$39,000 in energy costs per year.

The audits proposed for this project would be similar to the present MECS audits.

The City's analysis indicated that the project would be cost effective to participants and cost effective to the utility. The majority of participants (88%) in the current projects have an income less than \$12,000.

NSP supports the project because the target population is 100% rental and almost 100% low income.

The Commission finds that this project is appropriately designed to increase the energy efficiency of housing units occupied by renters and low income families and individuals - consumers specifically targeted for special consideration by Minn. Stat. Section 216B.241. Further, the City's analysis indicates the project is cost effective for participants. Therefore, the Commission will approve this project.

## **7. TOOL LENDING LIBRARY**

The Tool Lending Library (TLL) is a project proposed by the City of St. Paul. This project is currently being operated on a limited basis without NSP's support. The TLL is designed to help residents of the City make home improvements and to assist residents whose homes are in need of weatherization. The City stated that by making needed equipment available, residents are able to make the improvements themselves, reducing both installation costs and energy payments. Under this project low income residents would receive free use of tools. The City stated that 81% of the TLL's users had household incomes of less than \$25,000 and 24% were renters.

The City stated that through the use of insulation machines alone, consumers saved over \$108,000. Over the past three and a half years the TLL has loaned insulation machines to 175 customers. It stated that the average annual savings per home is \$150 per year based on homeowner installation.

The City requested funding from NSP of \$30,000 with \$9,000 of this provided as a fixed funding amount. The remaining funding would be provided on a performance basis, although the specific method was not clearly presented.

NSP stated that up to 80% of the TLL project costs could be saved by consolidation with another agency. NSP also stated that if the Commission approves the TLL funding, offsetting reductions should be made in the House Doctor Pilot program.

The TLL based its analysis of the benefits of its program on the loaning of insulation blowing machines. The TLL attributed all the energy conservation benefits resulting when a customer borrows an insulation blowing machine, purchases insulation, and then insulates the attic to the lending program alone. There are at least two problems with this approach. First, it assumes that the customer would not insulate the attic but for the existence of the tool lending program. This assumption is suspect because the homeowner must already have been informed of the benefits of attic insulation and may well be motivated to add insulation regardless of the cost of renting a blowing machine.

Second, while the TLL gives itself credit for all the benefits, the costs that the homeowner incurs to insulate the attic (e.g., the cost of the audit and the cost of the insulation) are omitted from the analysis.

Tools and insulation blowing machine rental is already available to St. Paul residents through private sources. Further, the average cost per weatherization tool loaned in the previous agreement year was \$30 per tool; this included all tools (e.g. the blowing machine, hammers, screwdrivers, etc).

The insulation blowing machine was loaned 53 times in the October 1984 through October 1985 agreement year. Customers could have rented this type of machine from a private business for approximately \$35 to \$50. Using the higher dollar amount, this results in the value of the rental of \$2,650 (53 x \$50), a benefit substantially less than the \$30,000 expense paid by NSP ratepayers.

Further, this project was considered and rejected by the Commission in last year's CIP proceeding. In its Order in NSP, G-002/M-86-249 (October 15, 1986), the Commission stated:

"The Commission will not approve the Tool Lending Library project at this time. There is no indication that this project will be cost-effective. The project costs appear to be unreasonably high compared to the benefits to NSP; the project costs an average of \$30 per weatherization tool loaned."

Nothing presented in the filings in this proceeding justifies a change in the Commission's conclusion regarding this project. Therefore, the Commission will disapprove this project. If the project was designed primarily to benefit renters and low income customers and if the project activities were incorporated into another organization to eliminate the overhead costs, it would have the potential to become an acceptable project.

## **8. TWIN CITIES NEIGHBORHOOD HOUSING SERVICE, INC. (TCNHS)**

This project was approved last year at a budget of \$33,600. The TCNHS is requesting a \$33,000 grant this year for energy conservation material to weatherize 30 low-to-moderate income residences in the Dayton's Bluff and West side area of St. Paul. Participants would receive weatherization material at no cost but would pay for the installation costs. The TCNHS stated that, in 1987, a 15 to 1 leveraging is possible for the proposed NSP grant.

NSP stated that the TCNHS proposal would qualify for consideration under the House Doctor project and that the TCNHS should be instructed to apply for funding under that project and its guidelines. NSP opposed the inclusion of this project in its CIP.

The Commission finds that all of the NSP supplied funds are used directly for weatherization material. Therefore, it can be presumed that the amount spent on this project will directly increase the energy efficiency of participant's homes. In last year's CIP proceeding, the TCNHS projected a 6 to 10 year payback on its weatherization work. This indicates that the project is expected to be cost effective.

An evaluation of this project has not been completed so it is unknown whether the project will or will not be found to be cost effective. Because this project was previously estimated to be cost effective, the Commission finds that it would be unreasonable to cancel this project before an evaluation or better estimate of cost effectiveness is performed. The Commission concludes that this project should be approved and that it should be evaluated for next year's CIP proceeding to determine its cost effectiveness.

## ADEQUACY OF NSP'S PROGRAM

The second issue is whether the projects discussed above constitute an adequate program.

The Minnesota Court of Appeals in Hanna Mining Company v. Minnesota Public Utilities Commission, 375 N.W.2d 550 (1985) ordered the Commission to adopt interpretive rules for determining what constitutes a "significant investment" as used in Minn. Stat. Section 216B.241, subd. 2 (1986). In response to the Court's order, the Commission has begun rulemaking proceedings to adopt interpretive rules for conservation improvement programs, including a rule defining "significant investment." (See MPUC Docket No. G, E-999/R-85-847.) However, the Commission does not interpret the Court's decision to prohibit consideration of applications by utilities for approval of conservation programs under the criteria set forth in the plain language of the statute while the rulemaking process takes place. To read the Court's decision otherwise would delay implementation of conservation programs that the Legislature has directed utilities to undertake. See Minn. Stat. Section 216B.241 (1986). In order to carry out the Legislature's directives concerning conservation programs by utilities, the Commission will proceed under its procedural rules currently in effect. It will apply the facts to the statutory law in evaluating programs proposed by utilities until such time as interpretive rules are adopted.

The Commission finds that NSP's proposed program is inadequate in three respects. First, the Company's proposed budget is substantially lower than the total spending level (\$906,300) approved by the Commission in last year's CIP Order, NSP, G-002/M-86-249. The Commission does not find the size of the proposed decrease in commitment to be acceptable, given the legislative mandate in Minn. Stat. Section 216B.241 (1986) and the conservation potential remaining in NSP's service area.

Second, NSP's proposed program is aimed entirely at the residential class of customers. While not disagreeing with this primary emphasis, the Commission recognizes that a considerable body of literature suggests that substantial conservation potential exists in the commercial class. (See, for example, the 1984 Energy Policy and Conservation Biennial Report by the Energy Division of the Minnesota Department of Energy and Economic Development.) No information available to the Commission suggests that this general statement is inapplicable to NSP's service area or that cost-effective conservation measures will take place at desirable levels in the commercial class without the incentives and emphasis which can be provided by a CIP project. The Commission concludes that NSP's efforts should be expanded to other customer groups (e.g., commercial customers).

Last year's CIP Order, NSP, G-002/M-86-249, directed NSP to develop and propose a cost-effective project targeted toward small commercial customers. NSP argued that it was unable to devise a cost-effective program. Therefore, NSP proposed that the House Doctor project be made available to low income rental property and stated that the existing SPREEE project could be classified as a commercial project.

NSP stated that commercial customers possess the ability to gain information if they desire. NSP provides information services to customers through its marketing efforts. NSP argued that this information "promotes effective use of gas, good will, and future investment in gas utilization equipment".

The DPS stated that the current gas market, characterized by low gas prices combined with a surplus of gas, cannot be presumed to extend indefinitely. Savings in avoided energy and demand costs can be realized in the future by the current implementation of conservation projects. Further, the DPS argued that a utility will be able to react more efficiently to future increases in gas costs if successful conservation projects have been identified, developed, and proven to operate efficiently.

The DPS also stated that the C&I energy market can be imperfect, which may justify utility intervention. Finally, the DPS stated that it is unconvinced that NSP has explored all available opportunities for cost-effective conservation projects targeting commercial customers. The Commission agrees with the DPS and concludes that NSP should offer a project targeted toward the commercial class.

The Commission has examined the types of projects which might be suitable for NSP to implement to increase its CIP commitment. A commercial energy audit project seems to be the most suitable project for NSP to carry out because it will allow auditors to note further opportunities for commercial conservation as well as leading to immediate conservation possibilities for the project participants. However, the NSP electric utility is already operating an audit program targeted at the commercial class. This audit program focuses on the total energy use of the customer, not just electricity use. An additional audit program operated by the gas utility would be a duplication of effort. Nevertheless, there is an opportunity for a greater application of the existing program through increased cooperation between the gas and electric utilities.

The Commission will direct NSP to develop a proposal to target the existing commercial audit program at gas customers that are most likely to have the greatest potential for conservation of gas. This target group of customers could be determined by NSP using its knowledge of its customers and through a systematic review of the results of the existing commercial audit program. Audit offers should be made to the identified customers. The audit should also be offered to NSP gas customers that are not NSP electric customers (e.g., Moorhead customers). The Commission finds that a target budget of \$25,000 is appropriate for this project, subject to modification when project details are known.



The Commission will order NSP to work with the DPS to develop a marketing plan for the commercial energy audit project and to file for approval of such a project within 60 days.

Third, the Commission is concerned with the lack of availability of conservation projects for customers living outside of the Twin Cities area. The only project that is available to residential customers outside of the Twin Cities area is the RCS audit program, and this project is not directed at low income customers. Thus, NSP's program is not geographically balanced. The Commission finds that NSP must expand its CIP program to include its residential customers located outside of the Twin Cities area by developing an additional project targeted to this group of customers. NSP will be directed to work with the DPS in developing a suitable project with an annual budget of approximately \$50,000.

The Commission has evaluated the program as proposed by the Company and modified by the Commission in light of the requirements of Minn. Stat. Section 216B.241, subd. 2 (1986). That statute requires utilities subject to its provisions to make significant investments in and expenditures for energy conservation improvements. It also requires the utilities to give special consideration to the needs of renters and low-income people in developing energy conservation programs.

The Commission concludes that NSP's program, as modified by the Commission, meets the statutory requirements. The indicated level of investment and expenditure will benefit approximately 4,600 customers, of whom approximately 2,500 are expected to be low-income persons or renters. The Company's financial commitment will be approximately \$891,500, which represents 0.33% of its total 1986 retail sales revenue and \$3.67 per Minnesota customer. The Commission is aware of the tentative and subjective nature of judging, at this point, the significance of NSP's investment and expenditure. Cost-effectiveness and the availability of other community resources for energy conservation can affect the program's significance. Reliable data on these and similar issues will not be available at least until the current projects are well under way. Evaluating the program as a whole, however, the Commission concludes that it constitutes a significant investment in and expenditure for energy conservation improvements.

Since the program also gives special consideration to the needs of renters and low-income persons, as required by statute, the Commission concludes that it meets the statutory requirements.

The Commission concludes that the projects described above constitute an adequate program for NSP for 1987-88, assuming that cost estimates, numbers of participants, and other assumptions are reasonably accurate. The projects constitute necessary and reasonable efforts by NSP to carry out its CIP responsibility.

In making these findings and conclusions on NSP's budget for 1987-88, the Commission is not approving specific budget or project detail for the second and succeeding years of any projects. Multi-year projects will be reviewed for appropriate changes in subsequent years.

#### OTHER MAJOR PROBLEMS TO ADDRESS THIS YEAR

The third issue is whether there are remaining problems which must be addressed this year.

##### Interim Status Reports

In order to monitor the progress by NSP in implementing the projects approved herein, the Commission will require the Company to file interim status reports on each of the projects. These reports will provide an opportunity to make adjustments in the projects, if necessary. The reports will be due within 60 days of the date of this Order and shall contain, at a minimum, the following information:

1. the number of participants compared to projected participation levels;
2. dollar expenditures compared to the total projected budget;
3. the number of conservation improvements completed;
4. a discussion of unanticipated barriers to participation and strategies to remove such barriers; and
5. a discussion of any unforeseen project problems or project changes.

#### CONSIDERATIONS FOR FUTURE FILINGS

The fourth issue is whether any additional restrictions and conditions should be placed on NSP's 1988-89 CIP filing, pursuant to the provisions of Minn. Rules, part 7840.0500, item L.

##### Timing and Content of Evaluation Reports

NSP stated that "NSP's May 1, 1987 CIP filing included an evaluation following the CIP Task Force outline for each program which has been in effect over one year. NSP will submit similar evaluations each May 1 in the Company's annual CIP filing for all programs with 12 months of past participation history." The Commission finds that this is an acceptable alternative to filing expected completion dates of evaluation reports in annual CIP filings.

The Commission will approve this procedure because it will provide an opportunity for effective evaluation of CIP projects at the time of the annual CIP review.

##### Cost-Effectiveness Tests

An area which has received considerable attention from CIP respondents is the type of methodology to use to determine cost-effectiveness. The Commission also has a keen interest in this area because of its responsibility to determine which costs and benefits are relevant in evaluating cost-effectiveness. The Commission encourages the DPS and NSP to continue their discussions on this matter. Further, to ensure the availability of the information needed to evaluate cost-effectiveness, the Commission will order NSP to describe clearly in its evaluations the methodologies and assumptions used by the Company for cost-benefit analysis.

##### Evaluation Plans

In NSP, G-002/M-86-249, the Commission directed NSP to submit a plan for evaluating the overall cost effectiveness of approved CIP projects. Appendix J of NSP's May 1, 1987 filing complied with this requirement.

However, the Commission finds that NSP's Evaluation Plan does not include all the points required in the CIP Task Force Evaluation Outline. In particular, "I. Project Description/Objectives", and "II. Program Process and Outcomes A. Participation" are missing. Also, the Evaluation Plan appears to be designed for audits only. The Commission will require that NSP clarify its plan to evaluate projects other than audits.

The Commission will require NSP to work with DPS to revise and clarify its Evaluation Plan to include the omissions noted above and resubmit its Plan within 60 days.

# ORDER

1. The Minnesota Public Utilities Commission hereby approves the 1987-88 Conservation Improvement Program for Northern States Power Company, Gas Utility, as described and modified herein. A total budget of \$891,500 is approved. The program shall include the following projects:

a. House Doctor Pilot	\$200,000
b. Energy Resource Center	165,000
c. St. Paul Neighborhood Energy Consortium	
- Energy Audit	129,600
- Materials & Seminars	5,000
- Energy Plans	6,000
d. Ramsey Action Program	
- Deferred Loan	105,000
e. Residential Conservation Service Audits	150,000
f. St. Paul Rental Energy Efficiency Enforcement Program	22,900
g. Twin City Neighborhood Housing Service	\$33,000
h. New Commercial energy audit project	25,000
i. New outstate project	<u>50,000</u>
TOTAL	\$891,500
2. Within 60 days of the date of this Order Northern States Power shall work with the Department of Public Service to develop and submit a marketing plan for the commercial energy audit project as discussed herein.
3. Within 60 days of the date of this Order, Northern States Power shall work with the Department of Public Service to develop and submit a conservation project targeted at residential customers living outside of the Twin Cities area as discussed herein.
4. Within 60 days of the date of this Order, Northern States Power shall submit an interim status report for each project. The report shall contain, at a minimum, the following information:
  - a. the number of participants compared to projected participation levels;
  - b. dollar expenditures compared to the total projected budget;
  - c. the number of conservation improvements completed;
  - d. a discussion of unanticipated barriers to participation and strategies to remove such barriers; and
  - e. a discussion of any unforeseen project problems or project changes.
5. Northern States Power's proposal to include, as a part of the May 1 annual CIP filings, an evaluation for each project which has been in effect over one year is approved.
6. Within 60 days of the date of this Order Northern States Power Company shall work with the Department of Public Service to revise and clarify its evaluation plan to include the omissions noted herein.
7. Northern States Power shall work with the DPS to resolve any methodological differences regarding cost-benefit analyses.
8. Northern States Power shall include in its evaluation reports a description of methodology and assumptions used for any cost-benefit analysis.

9. In its May 1, 1988 filing Northern States Power shall submit a proposal for funding the ERC on a performance basis replacing the present quarterly funding method. The Company shall consult with the ERC in its development of the new payment method.
10. Northern States Power shall make a good faith effort to obtain, and make available to the NEC, video materials covering low-cost conservation measures.
11. Northern States Power shall file 13 copies of all documents required by this Order with the Commission. Northern States Power shall also provide one copy each to the DPS and any other person requesting one. The DPS and other interested persons will have 15 days to file comments on the Company's filings with the Commission.
12. To the extent practicable, customers participating in Northern States Power's CIP projects shall have a free choice of the device, method or material, and seller, installer, or contractor for the CIP improvement.
13. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Mary Ellen Hennen  
Executive Secretary

(S E A L)